

## Description of Female Students Skills in Carrying Out Endorphin Massage Techniques to Reduce Menstrual Pain

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Submitted: February 2024

Revised: March 2024

Published: 30 March 2024

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### ABSTRACT

**Introduction:** Menstrual pain is pain felt during the menstrual cycle. The prevalence of primary Menstrual pain is generally experienced by adolescent girls aged 17-24 years by 67-90%. Menstrual pain has been identified as the most common menstruation-related cause of short-term school absenteeism among young girls. So menstrual pain in adolescents needs attention and information to provide appropriate treatment both pharmacologically and non-pharmacologically. Pharmacological treatment for menstrual pain can be overcome with analgesic drugs but causes addiction and dangerous side effects. One effective way to prevent menstrual pain is relaxation in the form of hand massage with endorphin massage techniques. This technique increases the release of endorphin and oxytocin hormones which function to reduce pain and based on research results show that the effectiveness of endorphin massage is more effective in reducing pain. **Objective:** The purpose of this research is to determine the description of female students' skills in carrying out endorphin massage techniques to relieve menstrual pain. **Method:** This study uses a descriptive research design. The sample in this study was determined using a quota sampling technique, namely as many as 32 respondents who fit the inclusion criteria. **Result:** The result of the research that respondents were able to carry out more endorphin massage technique, namely 20 people (62.5%), whereas 12 respondents (37.5%) were skilled at performing endorphin massage techniques. **Conclusion:** Most respondents were able to carry out the endorphin massage technique to reduce menstrual pain. In adolescent girls include menstrual conditions, unbalanced nutritional intake, eating and drinking patterns, non-compliance with Fe tablet consumption and lack of knowledge.

**Keywords:** endorphin massage, female students skills, menstrual pain

## **Introduction**

Menstrual pain is pain felt during the menstrual cycle, this pain is caused by an imbalance of the hormone progesterone in the blood, and increased production of prostaglandins and stress factors that cause menstrual pain (Salamah, 2019). The occurrence of primary menstrual pain has been widely reported in various literature studies. The prevalence of primary menstrual pain is generally experienced by adolescent girls aged 17-24 years by 67-90% (Ju et al., 2014). Menstrual pain has been identified as the most common menstruation related cause of short term school absenteeism among young girls. Recurrent school absenteeism has negative impacts on adolescent girls by reducing contact time for their learning which may have implications on the quality of education they receive and this has been reported to be of national and economic value (Femi-Agboola et al., 2017). Menstrual pain will affect learning activities to be disrupted, concentration decreases and there is no material that cannot be captured during learning (Ni Luh & Nengah, 2019).

Efforts to relieve pain can be done with two therapies or treatments. The first treatment is pharmacological treatment, which can be done using painkillers (analgesics) (Widowati et al., 2020). Although analgesics can reduce pain effectively, the use of analgesics will cause addiction and dangerous drug side effects (Muhidin et al., 2016). The second is non pharmacological treatment can be done by exercising, warm or cold compresses, music therapy, relaxation and consuming herbal medicine or herbal drinks (Widowati et al., 2020). Non-pharmacological pain management is safer to use because it does not cause side effects like drugs because non-pharmacological therapy uses physiological processes. Pain management includes light exercise or menstrual pain exercises, consuming fruit and vegetables, reducing sugar and caffeine levels and massage. One effective way to prevent menstrual pain is relaxation in the form of hand massage and warm compresses. Warm compresses can be done using various media, namely by using a warmed towel, a bottle filled with warm water, and a bladder. Another way of massage is the endorphin massage technique (Hartati et al., 2015).

Endorphin massage is a light touch method first developed by Constance Palinsky and used to manage pain. Light touch techniques also help normalize heart rate and blood pressure. This light touch technique includes a light massage that can make the fine hairs on the surface of the skin stand up. A number of studies have proven that this technique increases the release of endorphin and oxytocin hormones which function to reduce pain and based on research results, it shows that the effectiveness of endorphin massage is more effective in reducing pain (Rahayu et al., 2017).

Menstrual pain that never goes away makes medical personnel, one of which is physiotherapy, very capable of playing an important role in handling it. The role of physiotherapy in cases of menstrual pain itself or menstrual pain is to help provide exercise therapy in the form of deep breathing exercises which are deep breathing techniques with the aim of increasing the amount of oxygen in the body and providing a relaxing effect on the body and education in the form of healthy lifestyle and healthy activities to reduce the consumption of analgesic drugs that have long-term dependency effects (Prawata & Yetika, 2020).

## **Objective**

The purpose of this research is to determine the description of female students' skills in carrying out endorphin massage techniques to reduce menstrual pain.

## Method

This research is a type of literature study that includes a series of actions related to the This study is a descriptive observational study. The sample in this study were students of Muhammadiyah Ciamis Health College who complained of menstrual pain. The sample in this study was determined by quota sampling technique, with inclusion criteria being female students who experienced primary menstrual pain, female students with normal pregnancy, menstrual pain scale (4-10). Exclusion criteria in this study were female students who used analgesic drugs for 3 months/3 menstrual cycles. The research process began with filling out the consent form to become a respondent. Furthermore, respondents practiced endorphin massage to reduce menstrual pain one by one. Data analysis used univariate analysis, namely producing the distribution and percentage of student skills in carrying out endorphin massage techniques to reduce menstrual pain.

## Result

The result of the research implementation are in the form of data as follows:

Table 1. Frequency Distribution of Female Students' Skills in Performing Endorphin Massage Techniques to Reduce Menstrual Pain

Students Skills	Frequency (n)	Percentage (%)
Capable	20	62.5
Proficient	12	37.5
Total	32	100.0

Table 1 shows that respondents were able to carry out more endorphin massage technique, namely 20 people (62.5%), whereas 12 respondents (37.5%) were skilled at performing endorphin massage techniques.

## Discussion

Respondents who are able to perform endorphin massage techniques are more, namely 20 people (62.5%) compared to respondents who are proficient, namely 12 people (17.5%). This means that more respondents are able to perform endorphin massage but have not shown proficiency and skill. This condition can be caused by several factors, including the patient's sensitivity to endorphin massage touch which inhibits the massage. Endorphin massage is done by giving a touch in the form of a soft and light massage towards the left and right shoulders forming the letter V, towards the tailbone and done repeatedly when contractions occur. The touch that is done helps increase the release of the hormone oxytocin and through increased endorphins, continues the transmission of signals between nerve cells so that it can reduce the intensity of pain. Endorphin massage is a light touch massage given to the back of the body (Hrp. Lili Kartika Sari et al., 2022). In some patients who have a high sensitivity to touch on the back of the body, it causes a ticklish sensation when given a touch so that the respondent is not optimal when performing endorphin massage.

Touch and massage are sensory integration techniques that influence the activity of the autonomic nervous system. The descending nervous system works to release neuro regulators that inhibit the transmission of pain stimuli (Savitri, 2015). The A-delta fibers will

close the gate so that the Cortex Cerebri does not receive pain messages because it has been blocked by counter-stimulation so that the perception of pain changes (Kasumayanti, 2015).

In addition, another factor is the lack of understanding of respondents about touch techniques which can be seen from some respondents who are not quite right in doing touch during endorphin massage because they do not understand the position of the hands and the position of the touch. This is in line with the results of the study which showed that the higher the knowledge of female students, the better the skills they have in terms of Normal Childbirth Care. When viewed from the OR value, then someone who has high knowledge 6.375 x will have good skills compared to people who have low knowledge (Febrianti, 2019).

Knowledge is needed as a stimulus for thinking in growing self-confidence as well as encouraging attitudes and behavior, so it can be said that knowledge is a stimulus for a person's actions (Harigustian, 2021). Knowledge of endorphin techniques is the basis for skills in performing endorphin massage. The results of the study stated that there was a relationship between knowledge and nurses' skills in performing basic life support actions in the emergency installation of Yowari Hospital. The level of relationship between the two variables was (+/positive) 0.458, which means that the strength of the relationship is at a moderate relationship level, in addition, this positive relationship means that an increase in knowledge is followed by an increase in nurses' skills in performing basic life support actions (Hrp. Lili Kartika Sari et al., 2022).

## Conclusion

Respondents were able to carry out more endorphin massage technique, namely 20 people (62.5%), whereas 12 respondents (37.5%) were skilled at performing endorphin massage techniques.

## References

1. Anugraheni, V., & Wahyuningsih, A. (2013). Efektifitas kompres hangat dalam menurunkan intensitas nyeri dysmenorrhoea. *Kediri: Jurnal STIKES Baptis*, 6(1).
2. Aprilia. (2010). *Teknik Massage Endorphine*. Jakarta: Penerbit Gagas Media.
3. Field, T. (2016). Massage therapy research review. *Complementary Therapies in Clinical Practice*, 24, 19–31. <https://doi.org/10.1016/j.ctcp.2016.04.005>
4. Hartati, H., Walin, W., & Widayanti, E. D. (2015). Pengaruh Teknik Relaksasi Front Effleurage terhadap Nyeri Dismenore. *Jurnal Riset Kesehatan*, 4(3), 793–797.
5. Judha, M., & Sudarti, F. A. (2012). Teori pengukuran nyeri dan nyeri persalinan. *Yogyakarta: Nuha Medika*, 31, 38.
6. Kasumayanti, E. (2015). Faktor-faktor yang berhubungan dengan kejadian dismenore di SMAN 5 Pekanbaru. *STIKes Tuanku Tambusai*, 4(4), 8–20.
7. Koziar, B., Erb, G., Berman, A., & Snyder, S. J. (2010). *Fundamental Keperawatan Konsep, Proses, & Praktik*. Jakarta: EGC.
8. Kuswandi, L. (2014). *Gentle hypnobirthing a gentle way to give birth*. Puspa Swara.
9. Marlinda, R., & Purwaningsih, P. (2013). Pengaruh senam dismenore terhadap penurunan dismenore pada remaja putri di Desa Sidoharjo Kecamatan Pati. *Jurnal Keperawatan Maternitas*, 1(2).
10. Muhidin, F. (n.d.). A., Dyah, A., Adjeng, P. (2016). Pengaruh murottal ar-rahman terhadap nyeri dismenore pada remaja. *Jurnal Keperawatan Madiun*, 3(1), 38–43.
11. Prawata, A. H. M., & Yetika, W. (2020). Efektivitas Teknik Relaksasi Nafas Dalam Terhadap Penurunan Nyeri Haid (Dismenore) Pada Siswi. *Jurnal Abdimas Saintika*, 2(1), 45–53.

12. Rahayu, A., Pertiwi, S., & Patimah, S. (2017). Pengaruh endorphine massage terhadap rasa sakit dismenore pada mahasiswi Jurusan Kebidanan Poltekkes Kemenkes Tasikmalaya Tahun 2017. *Jurnal Bidan*, 3(2), 22–29.
13. Rahmadhayanti, E., Afriyani, R., & Wulandari, A. (2017). Pengaruh Kompres Hangat terhadap Penurunan Derajat Nyeri Haid pada Remaja Putri di SMA Karya Ibu Palembang. *Jurnal Kesehatan*, 8(3), 369–374.
14. Savitri, R. (2015). Gambaran skala nyeri haid pada usia remaja. *Skripsi Sarjana. Stikes 'Aisyiyah Cimahi, Bandung*.